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Two New Genera and Species of Aleyrodidae from Thailand and French Indo-China (Homoptera)

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Dialeurotrachelus n. g.

(Pupa case) Oblong, with a median ridge and minute spinules on the dorsum, but lacking tubercles. Cephalothorax with a pair of longitudinal sutures, which are divergent anteriorly. Submarginal area distinctly defined from the dorsal disk except on the anterior and posterior parts. Thoracic and caudal tracheal pores distinct. Caudal furrow distinct. Vasiform orifice elevated, divided at the hind end, without teeth. Lingula divided apically. Margin not dentate.

Genotype: Dialeurotrachelus cambodiensis n. sp.

This genus resembles Aleurotrachelus Quaintance et Baker, but differs in the submarginal area being defined from the dorsal disk except on the anterior and posterior parts, the presence of tracheal pores, the margin lacking teeth, and in the structures of vasiform orifice. Apparently much different from Aleurocerus Bondar, Mixaleyrodes Takahashi and Aleurotuberculatus Takahashi in many structures.

Dialeurotrachelus cambodiensis n. sp.

(Pupa case) Oblong, about 1.6 times as long as wide, broadest at midlength, narrowed on both ends, bluntly pointed at the front end, not constricted across the thoracic tracheal pores, a little sclerotised, not indented at the hind end, with a median ridge. Thoracic segments distinct; cophalothorax much shorter than the abdomen, with a pair of longitudinal sutures, which are diverging anteriorly and reaching the suture between the thorax and the abdomen; abdominal segments distinct on the median area, the basal segment not much produced anteriorly on the median area;

Two new genera and species of Aleyrodidae

rhachis distinct, reaching the margin of dorsal disk. Submarginal area defined from the dorsal disk except on the anterior and posterior parts,

wide, with about 60 small circular pores arranged in a row near the mesal margin. Dorsum with numerous mosaic like structures or polygonal sculptures on the median segmented area; rather densely with numerous minute spines except on the median segmented area and on the marminal narrow area, which spines are pointed and directed mesad; some small circular pores on the dorsal disk, which are a little larger than the spines; and with a pair of rather long fine setae near the hind end. Margin thin, not dentate, with 2 pairs of usual setae. Thoracic tracheal folds not distinct; the pores small, within the margin, closed, sclerotised on the marginal wide part, with 1 or 2 indistinct minute pointed denticles. furrow distinct, very narrow, much longer than the vasiform orifice, without markings; the pore almost as in the thoracic ones; lateral parts of the furrow with numerous very minute granules in transverse rows. Vasiform orifice small, elevated, quadrangular, wider than long, prominently divided at the middle of the hind end, without teeth and markings; the anterior marginal area sclerotised, not well defined from the 8th abdominal tergite. Operculum very short, much wider than long. Lingula divided

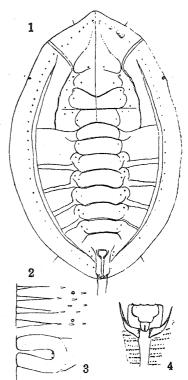


Fig. 1. Dialeurotrachelus cambodiensis n. sp. (Pupa case). (1) Dorsal view. (2) Marginal area. (3) Thoracic tracheal pore. (4) Vasiform orifice and basal part of caudal furrow.

apically, reaching the cleft of the orifice. Pupa ca. 1.3 mm. long, 0.85 mm. wide; median segmented area of 2nd abdominal segment 0.23 mm. wide, vasiform orifice 0.037 mm. wide (excluding margin), 0.046 mm. wide at base (including margin); caudal furrow 0.092 mm. long.

French Indo-China: Angkor, Cambodia; 3 specimens collected by me on an undetermined tree, April 23, 1940.

Heteraleyrodes n. g.

(Pupa case) Elongate, without dorsal tubercles, but with minute pores. Submarginal area not separated from the median area, but differentiated from it by a series of sculptures. Thoracic tracheal pores and combs, and caudal furrow and pore absent, but sculptures scattered behind the vasiform orifice. Vasiform orifice subcordate, with no tooth. Lingula slightly knobbed. Margin with small teeth. Venter without a marginal rim.

Genotype: Heteraleyrodes bambusae new species.

This genus is related to Laingiella Corbett, but is different from that in wanting compound pores and in possessing rough sculptures behind the vasiform orifice.

Heteraleyrodes bambusae n. sp.

(Pupa case) Reddish brown, shining, narrowly with wax on the margin. Elongate, twice as long as wide, not constricted on the cephalothorax, a little narrowed posteriorly, not indented on the margin. Meso-

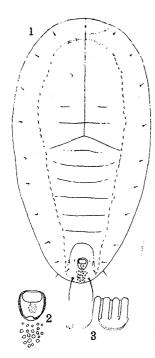


Fig. 2. Heteraleyrade) bambusae n. sp. (Pupa case). (1) Dorsal view. (2) Vasiform orifice and sculptures behind it. (3s Margin.

notum slightly or scarcely defined from the pronotum; suture between the thorax and the abdomen short, extending to the mesal margin of submarginal area; abdominal segments distinct on the median area; basal 6 abdominal segments each with a pair of small oval markings along the anterior margin, the 2nd-4th and 6th segments with a pair of very small transverse solerotised parts at the middle, which parts are much smaller than the markings, each with a pair of minute circular simple pores, one of the pores in a pair sometimes smaller; the 8th segment sclerotised. Submarginal area differentiated from the median area except on the posterior part, darker than the median area, brownish and with large reticulation-like markings along the border of median area, wide, with shallow concave-like markings; 20 short simple setae arranged in a single row, which are not reaching the margin; 20 pairs of minute circular pores present in a row mesad of the series of the setae; the pores similar to those on the median area. Dorsum sclerotised around and behind the vasiform orifice, with a pair of long bristles near the hind end and 2 pairs of short setae near the

vasiform orifice. Thoracic and caudal tracheal folds, pores and combs absent. Caudal furrow absent, but many polygonal sculptures scattered roughly behind the vasiform orifice, the sculptured part wider than the

orifice, reaching the hind end of body. Margin more sclerotised; marginal teeth very short, small, dense, rounded at the apex, 15 or 16 of them occupying a space of 0.092 mm.; a short distinct furrow present between the teeth; mesal marginal teeth indistinct, with a paler area. Vasiform orifice subcordate, somewhat wider than long, or as long as wide, thickened on the lateral margin, lacking teeth, a little shorter than the space between the orifice and the hind end of body. Operculum much wider than long, occupying two-thirds or half the orifice. Lingula exposed, slightly knobbed. Antennae short, as long as the fore leg. Pupa case 0.95 mm. long, 0.47 mm. wide, vasiform orifice 0.046 mm. wide (including margin), space between vasiform orifice and hind end 0.046 mm., long dorsal seta near hind end 0.1 mm.

Thailand: Bangkok, many pupa cases were collected by me on bamboo March 26 and 29, 1940; Chengmai, common on bamboo in May, 1940.

Easily differentiated from Aleurocybotus graminicolus Quaintance et Baker by the presence of many sculptures behind the vasiform orifice, and by other characters.